Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-50 (canceled)

51. (original): An apparatus for minimally invasive isolation of tissue to be treated, comprising:

an elongate tubular shaft having a proximal end and a distal end;

said shaft having a first fluid passage and a second fluid passage;

said shaft having a plurality of lumens extending therethrough;

said distal end of said shaft having a closed tip said tip and distal end configured for introduction into the body of a patient;

an inflatable member having an interior and an exterior disposed on said distal end of said elongate tubular shaft;

said interior of said inflatable member being in fluid communication with said first fluid passage and said second fluid passage of said shaft;

a fluid;

means for selectively flowing said fluid into said shaft through said first fluid passage to said interior of said inflatable member and through said second fluid passage, and inflating said inflatable member;

wherein said inflatable member is adapted to separate and isolate tissue to be treated from adjacent tissue.

52. (original): An apparatus as recited in claim 51, further comprising means for decreasing the temperature of said fluid during fluid circulation.

53. (original): An apparatus as recited in claim 52, further comprising means for increasing temperature of said fluid during fluid circulation.

54. (original): An apparatus as recited in claim 51, further comprising means for regulating the pressure of said fluid.

55. (original): An apparatus as recited in claim 51, further comprising means for regulating the flow of said fluid.

56. (original): An apparatus as recited in claim 51, wherein said fluid comprises a gas.

57. (original): An apparatus as recited in claim 56, wherein said gas comprises air.

58. (original): An apparatus as recited in claim 51, wherein said fluid comprises a liquid.

59. (original): An apparatus as recited in claim 58, wherein said liquid is selected from the group of liquids consisting essentially of water, silicon oil, diagnostic imaging contrast agents and saline solution.

60. (original): An apparatus as recited in claim 51, wherein said inflatable member comprises a plurality of balloons connected to said distal end of said shaft and in fluid communication with said first fluid passage and said second fluid passage.

61. (original): An apparatus as recited in claim 51, further comprising:
a plurality of sensors connected to said distal end of said shaft;

said sensors operably coupled with a measuring device outside of the body of a patient.

62. (original): An apparatus as recited in claim 61, wherein said sensors comprise a miniature thermocouple configured to measure the temperature of the circulating fluid within said inflating member.

63. (original): An apparatus as recited in claim 61, wherein said sensor comprises a miniature thermocouple configured to measure the temperature of the tissue surrounding the inflating member.

64. (original): A method for treatment of the prostate gland, comprising:

inserting a catheter assembly into the general proximity of the target prostate gland;

placing the distal end of said inserted catheter assembly in a space between the rectum and the prostate gland;

inflating an inflatable member of the catheter assembly between the prostate gland and the rectal wall;

initiating and conducting treatment of the prostate gland tissue; and

deflating the inflatable member of the catheter assembly and removing said catheter assembly once treatment is completed.

65. (original): A method as recited in claim 64, further comprising:

sensing and monitoring the temperature of the rectal wall and the surface of prostate gland during the treatment of the prostate gland.

66. (original): A method as recited in claim 64, further comprising:

sensing and monitoring the temperature of the surface of the inflatable member

during the treatment of the prostate gland.

67. (original): A method as recited in claim 64, further comprising:

monitoring the temperature of a fluid within said inflatable member during the treatment of the prostate gland.

68. (original): A method as recited in claim 64, further comprising:

inflating or circulating a thermally conductive fluid through said catheter assembly during the treatment of the prostate gland by thermotherapy.

69. (original): A method as recited in claim 64, further comprising:

regulating the temperature and flow of said thermally conductive fluid through said catheter assembly during the treatment of the prostate gland.

70. (original): A method as recited in claim 64, further comprising:

inflating or circulating a thermally non-conductive fluid through said catheter assembly during the treatment of the prostate gland by thermotherapy.

71. (original): A method as recited in claim 64, further comprising:

regulating the temperature and flow of said thermally non-conductive fluid through said catheter assembly during the treatment of the prostate gland.

72. (original): A method as recited in claim 64, further comprising:

inflating or circulating a fluid through said catheter assembly that is below the normal body temperature during the treatment of the prostate gland by thermotherapy.

73. (original): A method as recited in claim 64, further comprising:

inflating said inflatable member with a gas to physically displace the prostate

from the rectal wall and form an acoustic barrier to protect rectal wall or surrounding tissue; and

initiating and completing ultrasonic treatment of the prostate gland.

74. (original): A method as recited in claim 64, further comprising:

inflating said inflatable member with an acoustically transmissible material to allow for diagnostic imaging;

replacing said acoustically transmissible material with an acoustically blocking material to physically displace the prostate from the rectal wall; and form an acoustic barrier to protect the rectal wall or surrounding tissue; and

initiating and completing ultrasonic treatment of the prostate gland.

75. (original): A method as recited in claim 74, wherein pressure within said catheter assembly remains constant during the replacement of said gas with said liquid.

76. (original): A method as recited in claim 74, wherein the temperature of said liquid replacing said gas is lower than the temperature of the body.

77. (original): A method as recited in claim 74, wherein the temperature of said liquid replacing said gas is higher than the temperature of the body.

78. (original): A method as recited in claim 64, wherein the insertion and placement of the catheter assembly is monitored by a process selected from the group consisting essentially of CT, fluoroscopic imaging, magnetic resonance imaging and transrectal or external ultrasonic imaging and X-ray.

79. (original): A method for treatment of a diseased tissue site, comprising:

inserting a catheter assembly into the general proximity of a diseased tissue site;

placing the distal end of said inserted catheter assembly at an edge between the target tissue site and a sensitive healthy tissue or non-targeted site;

inflating an inflatable member of the catheter assembly between the target tissue and non-targeted tissue;

initiating and conducting treatment of the target tissue once the inflatable member is inflated; and

deflating the inflatable member of the catheter assembly and removing said catheter assembly once treatment is completed.

80. (original): A method as recited in claim 79, further comprising:

sensing and monitoring the temperature of the sensitive tissues during the treatment of the target tissue.

81. (original): A method as recited in claim 79, further comprising:

monitoring the temperature of the inflatable member during the treatment of the target tissue.

82. (original): A method as recited in claim 79, further comprising:

cycling a thermally conductive fluid through said catheter assembly during the treatment of the target tissue by thermotherapy.

83. (original): A method as recited in claim 82, further comprising:

regulating at least one of the temperature, pressure and flow of said thermally conductive fluid through said catheter assembly during the treatment of the target tissue.

84. (original): A method as recited in claim 79, further comprising:

inflating said inflatable member with a gas to physically displace the target tissue

from the sensitive tissue and form an acoustic barrier;

initiating and completing ultrasonic treatment of the target tissue; and

replacing said gas within said inflatable member and said catheter assembly with a liquid after the conclusion of the ultrasonic treatment of the target tissue.

85. (original): A method as recited in claim 79, further comprising:

regulating the pressure of said gas within said catheter assembly and said inflatable member.

86. (original): A method as recited in claim 84, wherein the temperature of said liquid replacing said gas is lower than the temperature of the body.

87. (original): A method as recited in claim 79, wherein the insertion and placement of the catheter assembly is monitored by a process selected from the group consisting essentially of CT fluoroscopic imaging, magnetic resonance imaging and transrectal or external ultrasonic imaging.

88. (original): A method for radiation treatment of the prostate gland, comprising:

inserting a catheter assembly into the general proximity of the target prostate gland;

placing the distal end of said inserted catheter assembly in a space between the rectum and the prostate gland;

inflating an inflatable member of the catheter assembly between the prostate gland and the rectal wall ;

initiating and conducting radiation treatment of the prostate gland tissue; and

deploying said inflatable member and said catheter assembly for the duration of the implantation.

89. (original): A method as recited in claim 88, further comprising:

inflating said inflatable member with material that modifies radiation dose distribution.

90. (original): A method as recited in claim 88, further comprising the step of:

sensing the exposure of said catheter assembly to radiation after initiating and conducting radiation therapy of said prostate gland.

91. (original): A method as recited in claim 88, further comprising the step of:

sensing the exposure of tissues surrounding the prostate gland to radiation after initiating and conducting radiation therapy of said prostate gland.

92. (original): A method as recited in claim 88, further comprising the step of:

repositioning tissues that are in close proximity to the prostate gland prior to initiating and conducting radiation therapy of said prostate gland.

93. (original): A method for treatment of a diseased tissue site, comprising:

inserting a catheter assembly into the general proximity of a diseased tissue site;

placing the distal end of said inserted catheter assembly at an edge between the target tissue site and a sensitive healthy tissue or non-targeted site;

inflating a first chamber of an inflatable member of the catheter assembly between the target tissue and non-targeted tissue;

inflating a second chamber of said inflatable member of the catheter assembly between the target tissue and non-targeted tissue;

initiating and conducting treatment of the target tissue once the inflatable member is inflated; and

deflating the inflatable member of the catheter assembly and removing said catheter assembly once treatment is completed.

94. (original): A method as recited in claim 93, further comprising:
inflating said first chamber of said inflatable member with a first fluid; and
inflating said second chamber of said inflatable member with a second fluid.

95. (original): A method as recited in claim 93, further comprising:
cycling said first fluid through said first chamber and cycling said second fluid through said second chamber during the treatment of said target tissue.

96. (original): A method as recited in claim 93, further comprising:
regulating the temperature of said first fluid and said second fluid.

97. (original): A method as recited in claim 96, further comprising:
sensing the temperature of said first fluid and said second fluid.

98. (original): A method as recited in claim 93, further comprising:
delivering therapeutic or diagnostic agents to the tissues surrounding the distal end of the catheter assembly.